ZHATKANBAYEV, Zh.Zh.

Intensity of transpiration and water consumption by the dominant plant species of basic communities and the water economy of soils in the dry steppes of central Kazakhstan. Trudy MOIP 8:66-71 '64. (MIRA 17:12)

ZHATKANBAYEVA, D.

Helminths of piscivorous birds of Kazakhstan. Trudy Inst. zool. AN Kazakh. SSR 22:110-125 '64.

(MIRA 17:12)

SKVARKOVSKIY, V.B.; GLEBOV, V.A., kand. tekhn. nauk, dotsent; ZHATKIN, G.F.; MIKHAYLICHENKO, N.G.; POPOV, A.D.; SIDOROV, Ye.A.; TSVETNOY, S.M.

Stand for testing miniature electrical machines in electric instrument systems. Sbor. st. RIIZHT no.45:58-64 '64.

(MIRA 19:1)

ZHAT'KO, O.N.; BOGOYAVLENSKIY, A.N.

Change the structure of supervisory organizations. Stroi. truboprov. 9 no.10:7-8 O '64. (MIRA 18:7)

1. Gosgazinspektsiya, Khar'kov (for Zhat'ko). 2. Spetsializirovannoye upravleniye pusko-naladochnykh rabot, Dikan'ka Poltavskoy oblasti (for Bogoyavlenskiy).

ZHAT'KO, O.N.

Improve the parameters and the technology of testing gas pipe lines. Stroi. truboprov. 9 no.4:36-37 Ap '64. (MIRA 17:9)

1. Gosgazinspektsiya Gosudarstvennogo proizvodstvennogo komiteta po gazovoy promyshlennosti SSSR.

ZHAT'KO, O.N.

Safety measures during construction ofloopings and parallel routes. Stroi.truboprov. 8 no.7:31 Jl '63. (MIRA 17:2)

1. Gosudarstvennaya gazovaya inspektsiya Gazproma SSSR, Khar'kov.

ZHAT'KO, O.N.

It is necessary to improve the design solutions of condensation tanks. Stroi. truboprov. 8 no.11:18-20 '63 (MIRA 17:7)

1. Otdeleniye Gosgazinspektsii Gazproma SSSR.

ZHAT'KOVA, M.V.

ZHAT'KOVA, M.V.

Removal of a foreign body (a needle from the esophagus. Sov.med. 21 no.4:122-123 Ap '57. (MIRA 10:7)

1. Iz kafedry gospital'noy khirurgii (zav. - doktor meditsinskikh nauk A.V.Belichenko) Kurskogo meditsinskogo instituta (dir. - prof. A.V.Savel'ev)

(ESOPHAGUS--FOREIGN BODIES)

ZHAT'KOVA, M. V.:

ZHAT'KOVA, M. V.: "The course of acute intestinal impassability, using bromine preparations (experimental-clinical investigation)." Min Health USSR. Kazan' State Medical Inst. Kazan', 1956 (Dissertation for the Degree of Candidate in Medical Sciences)

So: Knizhnaya letopis' No. 38, 1956 Moscow

ZHAT'KOVA, M.V. (Kursk)

Extensive resection of the small intestine in intestinal obstruction. Klin.med. 35 no.11:138-139 N '57. (MIRA 11:2)

1. Iz kafedry gospital'noy khirurgii (zav. - doktor meditsinskikh nauk A.V.Belichenko) Kurskogo meditsinskogo instituta (dir. - prof. A.V.Savel'yev)

(INTESTINAL OBSTRUCTION, surg.
resection of total small intestine)
(INTESTINE, SMALL, surg.
total resection in intestinal obstruct.)

ZHAT'KOVA, M.V. (Kursk, ul. Radishcheva, d.50, kv.13)

Gastric volvulus. Vest. khir. 80 no.2:105 F '58. (MIRA 11:3)

1. Iz kafedry gospital'noy khirurgii (zav.-doktor med.nauk A.V. Belichenko) Kurskogo meditsinskogo instituta.
(STOMACH--DISEASES)

ZHATOKOVA, T. N.

APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R002064610010-1"

KRUTIKOV, L.P.; ZHATOVA, A.Ye.

Effectiveness of the use of dry bacterial starters in cold-water retting of hemp on collective farms. Truiy Vses. inst. sel'khoz. mikrobiol. 16:223-228 '60. (MIRA 13:9)
(Hemp) (Retting) (Clostridium)

Zhatov I.V.

ZHATOV, I.V.; PETROV, A.A.; AGEYEVA, V.A.; UKHANOVA, V.A.; BOVVA, D.L., red.; TYUTYAYEV, B.A., red.

[Novgorod Province during forty years of the Soviet regime, 1917-1957; a statistical manual] Novgorodskaia oblast' za 40 let Sovetskoi vlasti (1917-1957); statisticheskii sbornik. [Novgorod] Knizhnaia red. gazety "Novgorodskaia pravda," 1957. 501 p. (MIRA 11:3)

1. Novgorodskaya oblast'. Statisticheskoye upravleniye. 2. Nachal'nik Novgorodskogo oblastnogo statichesticheskogo upravleniya (for Bovva). 3. Novgorodskoye oblastnoye statisticheskoye upravleniye (for Zhatov, Petrov, Ageyeva, Ukhanova)
(Novgorod Province--Statistics)

KRUTIKOVA, L.P.; ZHATOVA, A.Ye.

Large-scale tests of the effectiveness of dry bacterial starters in high-temperature retting of hemp at a hemp factory. Trudy Vses. inst. sel'khoz. mikrobiol. no.14:303-308 '58. (MIRA 15:4)
(Hemp) (Retting)

ZHAUTYKOV, O.A.

36557. Aleksandr mikhaylovich lyapunov. (Matematik. K 30-letiyu so dnya smerti). Vestnik akad. nayk kazakh. ssr, 1949, No. 8, c 79-91

SO: Letopis' Zhurnal'ynkh Statey, Vol. 50, Moskva, 1949

ZHAUTYKOV, O.

[redacted]

K.P.Persidskii; on the occasion of his 50th birthday. Vest.AN Kazakh. SSR 10 no.11:46-50 N '53. (MLRA 6:12)
(Persidskii, Konstantin Petrovich, 1903-)

ZHAUTYKOV, O.A.

On a Cauchy problem for a denumerable partial-derivative first-order equation system. Izv.AN Kazakh.SSR.Ser.astron., fiz., mat. i mekh. no.129:41-50 '53. (MLRA 9:5)

(Differential equations, Partial)

ZHAUTIKOV, O. A.

2

Žeutikov, O. A. Konstantin Petrović Porudeki [illegible]
Hnech Sirbda [illegible]

ZHAUTYKOV, O.A., kandidat fiziko-matematicheskikh nauk.

Scientific conference of the mathematics and mechanics section.
Vest. AN Kazakh. SSR 11 no.6:104-107 Je '54. (MLRA 7:8)
(Mathematics--Congresses)

ZHAUTYKOV, O.A.

Brief survey of the development of a theory of differential equations with partial derivatives. Vest.AN Kazakh.SSR 11 no.7:4-19 Jl'55. (MLRA 8:10)

(Differential equations)

ZHAUTYKOV, O.A.

The problem of constructing integrals for equations with partial derivatives of the first order with a denumerable set of independent variable. Izv.AN Kazakh.SSR.Ser.mat. i mekh. no.4:48-69 '56. (MIRA 10:3)

(Integrals) (Linear equations)

SOV/124-57-7-8101

Translation from: Referativnyy zhurnal. Mekhanika, 1957, Nr 7, p 99 (USSR)

AUTHOR: Zhautykov, O. A.

TITLE: On a Certain Seepage Problem (Ob odnoy zadache fil'tratsii)

PERIODICAL: Izv. AN KazSSR, ser. matem. i mekhan., 1956, Nr 4, pp 70-79

ABSTRACT: The author investigates the plane-radial unsteady-state seepage of a uniform elastic fluid in an infinitely extended elastic layer. The flow toward a well with radius R_c inside a zone of radius R_k is examined; the porosity of the layer is designated as m, its permeability is k, and its piezoconductivity coefficient a^2; the total volumetric yield of the well is assumed as constant. The pressure $p(r, t)$ at any point of the layer is determined. The solution is reduced to the finding of the solution of the differential equation

$$\frac{\partial^2 p}{\partial r^2} + \frac{1}{r}\frac{\partial p}{\partial r} = \frac{1}{a^2}\frac{\partial p}{\partial t} \qquad (1)$$

which satisfies several initial and boundary conditions; one of these conditions is the following

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On a Certain Seepage Problem

$$p(r, 0) = \phi(r)$$

By employing Laplace transform

$$\bar{p}(r, s) = \int_0^\infty p(r, t)\, e^{-st}\, dt \qquad (2)$$

the author transforms equation (1) to the form

$$\frac{d^2\bar{p}}{dr^2} + \frac{1}{r}\frac{d\bar{p}}{dr} - \frac{s}{a^2}\bar{p} = -\frac{s\,\phi(r)}{a^2} \qquad (3)$$

Since the multiplier s in the right part of the equation is redundant, this result is incorrect. This error shows up in the author's further operations. Bibliography: 5 references.

V. A. Karpychev

Card 2/2

ZHAUTYKOV, O.A.

Solving a nonlinear partial differential equation of the first order of a denumerable set of independent variables. Izv. AN Kazakh. SSR. Ser. mat. i mekh. no.5:45-61 '56. (MLRA 10:2)

(Differential equations, Partial)

ZHAUTYKOV, O.A., kandidat fiziko-matematicheskikh nauk.

The role of the great Russian mathematician, N.I.Lobachevskii, in world science. Vest.AN Kazakh.SSR 12 no.2:67-76 F '56. (Lobachevskii, Nikolai Ivanovich, 1792-1856) (MLRA 9:6)

ZHAUTYKOV, O. A.

"Development of Mathematics in Kazakhstan." p. 260. in Science in Kazakhstan during the Forty Years of ;the Soviet Regime. Alma-Ata. Izd-vo AN Kazakhskoy SSR, 1957. 452p. (ed. Stapayer, K. I)

Xx This is a collection of articles (20) compiled by 24 authors on various aspects of scientific progress in Soviet Kazakhstan. One third of the articles also deal with the progress made in the main fields of industrial endeavor. The articles on the development of science survey the main contributions made in the respective branches by Kazakh scientists, and enumerate and describe the existing scientific institutes, organizations, and universities. A large number of scientists are mentioned and their fields of intersest stated.

SOV/124-58-11-12901

Translation from: Referativnyy zhurnal, Mekhanika, 1958, Nr 11, p 148 (USSR)

AUTHOR: Zhautykov, O. A.

TITLE: On the Solution of a Particular Problem of the Theory of Seepage (Po povodu resheniya odnoy zadachi teorii fil'tratsii)

PERIODICAL: Izv. AN KazSSR. Ser. matem. i mekhan., 1957, Nr 6 (10), pp 46-50

ABSTRACT: An examination of the problem (Zhautykov, O. A., Izv. AN KazSSR, Ser. matem. i mekhan., 1956, Nr 4, pp 70-79; RZhMekh, 1957, Nr 7, abstract 8101) on the pressure distribution in an elastic stratum following the sudden stoppage of the operation of a deep-well pump, assuming that the continuing flow of the liquid toward the well results in a dynamic rise of the free surface, i. e., the pressure on the well bottom is increased. The solution of the heat-conductivity equation

$$\frac{\partial^2 p}{\partial r^2} + \frac{1}{r}\frac{\partial p}{\partial r} = \frac{1}{a^2}\frac{\partial p}{\partial t}, \quad R \leq r \leq R_k, \quad t \geq 0$$

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SOV/124-58-11-12901

On the Solution of a Particular Problem of the Theory of Seepage

under the conditions:

$$p(r,0) = \phi(r) \qquad \text{for } R \leq r \leq R_k$$

$$p(R_k, t) = p_k = \text{const} \qquad \text{for } t \geq 0$$

$$\left(\frac{\partial p}{\partial r}\right)_{r=R} = \gamma \left(\frac{\partial p}{\partial t}\right)_{r=R} \qquad \text{for } t \geq 0$$

where γ is a constant and R is the radius of the well, is sought in the form of $p(r,t) = u(r,t) + \phi(r)$, wherein the Laplace transform is used. The expression for the function $u(r,t)$ is found; however, in the transition to $u(r,t)$ the author does not investigate the existence of the roots of the polynomial of the Bessel functions that enters as a factor into the denominator of the expression of the Fourier-Mellin inversion formula under the integral, i.e., the possible presence of additional poles is not investigated. Therefore, the problem as set up does not appear complete, and the final result thereof appears unsubstantiated.

V. N. Nikolayevskiy

Card 2/2

ZHAUTYKOV, O.A.

39-1-3/8

AUTHOR: ZHAUTYKOV, O.A. (Alma-Ata)

TITLE: The Generalization of the Poisson Brackets for Functions of Enumerably Many Variables (Obobshcheniye skobok Puassona dlya funktsiy schetnogo mnozhestva peremennykh).

PERIODICAL: Matematicheskiy Sbornik, 1957, Vol 43, Nr 1, pp. 29-36 (USSR)

ABSTRACT: Let the functions $\varphi(x_1, x_2, \dots ; z_1, z_2, \dots)$ and $\psi(x_1, x_2, \dots ; z_1, z_2, \dots)$ be continuous in the domain $H: |x_k| < R, \ |z_r| < R$ $(k, r = 1, 2, \dots)$ with respect to the metric $\varrho[(x_1, x_2, \dots ; z_1, z_2 \dots), (x_1', x_2', \dots ; z_1', z_2' \dots)] = \sup \{ |x_1 - x_1'|, \dots ; |z_1 - z_1'|, \dots \}$ and uniformly bounded. They are assumed to possess continuous, uniformly bounded partial derivatives of first order and satisfy the conditions

$$|\varphi(x_1, x_2, \dots, x_{m-1}, x_m', x_{m+1}', \dots ; z_1, z_2, \dots, z_{m-1}, z_m', z_m' + 1, \dots) -$$
$$- \varphi(x_1, x_2, \dots, x_{m-1}, x_m'', x_{m+1}'', \dots ; z_1, z_2, \dots, z_{m-1}, z_m'', z_{m+1}'', \dots)| \leqslant$$
$$\leqslant \varepsilon_m \Delta z;$$

etc. for ψ where $\Delta z = \sup \left[|x_m' - x_m''|, \dots, |z_m' - z_m'' , \dots \right]$. For $m \to \infty$ it is assumed that ε_m tends to 0 uniformly in x, x', x'', z, z', z''.

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The Generalization of the Poisson Brackets for Functions of Enumerably Many Variables. 39-1-3/8

The series
$$(\varphi,\psi) = \sum_{k=1}^{\infty}\left(\frac{\partial\varphi}{\partial z_k}\cdot\frac{\partial\psi}{\partial x_k} - \frac{\partial\varphi}{\partial x_k}\cdot\frac{\partial\psi}{\partial z_k}\right)$$

which is uniformly convergent under these conditions is denoted as Poisson bracket. It is $(\varphi,\psi) = -(\psi,\varphi)$, $(\varphi,c\psi)=c(\varphi,\psi)$, $(\varphi,\psi+\chi) = (\varphi,\psi) + (\varphi+\chi)$, $(\varphi,\chi\psi) = \chi(\varphi,\psi) + \psi(\varphi,\chi)$,
$$(\varphi, \phi(f_1,f_2,\dots)) = \sum_{i=1}^{\infty} (\varphi,f_i)\frac{\partial\phi}{\partial f_i}.$$

There also holds the Poisson identity:
$$(\varphi,(\psi,\omega)) + (\psi,(\omega,\varphi)) + (\omega,(\varphi,\psi)) = 0.$$

Two Soviet references are quoted.

SUBMITTED: May 21, 1956

AVAILABLE: Library of Congress

Card 2/2

ZHAUTYKOV, O.A.

card 2

16(1); 14(10) PHASE I BOOK EXPLOITATION SOV/1281

Akademiya nauk Kazakhskoy SSR. Sektor matematiki i mekhaniki

Trudy, t. 1 (Transactions of the Mathematics and Mechanics Section, Kazakh S.S.R. Academy of Sciences, v. 1) Alma-Ata, Izd-vo AN Kazakhskoy SSR, 1958. 207 p. 2,500 copies printed.

Eds.: Vaslavskiy, N.A. and Shevchuk, T.I.; Tech. Ed.: Rorokina, Z.P.; Editorial Board: Akushskiy, I.Ya., Archashnikov, V.P., Zhautykov, O.A. (Resp. Ed.), Zhilenko, L.G. (Resp. Secretary), Molyukov, I.D., Strel'tsov, V.V.

PURPOSE: This book is intended for scientists, and students taking senior physics and mathematics courses at vuzes.

COVERAGE: The book contains contributions by scientists in Kazakhstan in the fields differential equations, theory of elasticity, algebra, nomography, calculation by machine, theory of plasticity, mechanics of a medium of variable mass, etc. It is dedicated to the 10th anniversary of the organization of the Sektor matematiki i mekhaniki Akademii nauk Kazakhskoy SSR (Mathematics and Mechanics Section, Academy of Sciences, Kazakh SSR.)

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AVAILABLE: Library of Congress

LK/sfm
4-3-59

ZHAUTYKOV, O.A.

Mathematics in Kazakhstan during the Soviet regime. Trudy Sekt.mat. i mekh.AN Kazakh.SSR 1:5-24 '58. (MIRA 11:12)
(Kazakhstan--Mathematics)

ZHAUTYKOV, O.A.

One partial linear differential equation of the first order having a denumerable set of independent variables and containing a denumerable set of parameters. Trudy Sekt.mat. i mekh.AN Kazakh. SSR 1:25-40 '58. (MIRA 11:12)
(Differential equations, Partial)

ZHAUTYKOV, O.A.

Deriving solutions of the Cauchy problem for infinite systems of partial linear differential equations. Izv.AN Kazakh.SSR. Ser.mat.i mekh. no.8:3-17 '59. (MIRA 13:5)
(Differential equations, Linear)

APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R002064610010-1"

ZHAUTYKOV, O.A.

Cauchy problem for a system of a finite number of partial linear equations of the first order with an enumerable set of arguments. Izv.AN Kazakh.SSR.Ser.mat.i mekh. no.8:18-20 '59. (MIRA 13:5)

(Differential equations, Linear)

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SOV/39-49-3-4/7

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AUTHOR: Zhautykov, O.A. (Alma-Ata)

TITLE: On a Denumerable System of Differential Equations With Variable Parameters

PERIODICAL: Matematicheskiy sbornik, 1959, Vol 49, Nr 3, pp 317-330 (USSR)

ABSTRACT: Let the denumerable system

(1) $$\frac{dx_s}{dt} = f_s(t, x_1, x_2, \ldots, \mu) \quad , s = 1,2,\ldots$$

be given. Let t be a real variable, x_s real or complex variables, f_s real or complex functions, μ parameter. Let f_s be continuous in H : $0 \le t \le T$, $|x_s| \le R$ (s = 1,2...), $\lambda_0 \le \mu \le \lambda_1$. In H let

(2) $$|f_s(t, x_1, \ldots, x_{m-1}, x_m', x_{m+1}', \ldots ; \mu) - f_s(t, x_1, x_2, \ldots, x_{m-1}, x_m'', x_{m+1}'', \ldots ; \mu)| \le \varepsilon_m \Delta u \quad (s = 1,2,\ldots)$$

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On a Denumerable System of Differential Equations With Variable Parameters SOV/39-49-3-4/7

where $\varepsilon_m \to 0$ for $m \to \infty$ and $\Delta u = \sup \left[|x'_m - x''_m|, |x'_{m+1} - x''_{m+1}|, \ldots \right]$. Let $|f_s(t,0,0,\ldots;\mu)| \leqslant B(t)$ for all $t \in [0,T]$, where $B(t)$ is continuous. Let $|f_s(t,x_1,x_2,\ldots,\mu)| \leqslant A(t) \sup \left[|x_1|, |x_2|, \ldots \right] + B(t)$, $A(t)$ continuous too. For each sequence $x_1(t,\mu)$, $x_2(t,\mu), \ldots$, continuous for $\lambda_0 \leqslant \mu \leqslant \lambda_1$ on $[0,T]$ and satisfying the conditions $|x_s(t,\mu)| \leqslant R$, let $f_s\left[t, x_1(t,\mu), x_2(t,\mu), \ldots\right]$ be measurable on $[0,T]$.

Theorem 1 states that only one bounded solution of (1) which is uniformly continuous with respect to t and μ goes through each internal point of H. This solution exists for all

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On a Denumerable System of Differential Equations With Variable Parameters

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$t \in [0,T]$, for which it is

$(*)$ $\sup \left[|x_1(t,\mu)|, |x_2(t,\mu)|, \ldots \right] \leqslant R$.

Besides (1) consider the shortened system

$$(5) \quad \frac{dx_i}{dt} = f_i\,(t, x_1, x_2, \ldots, x_n, 0, 0, \ldots ; \mu) \quad i = 1, 2, \ldots, n \, .$$

Theorem 2 gives conditions under which the solutions of (5) for $n \to \infty$ tend uniformly in μ to the solutions of (1). Theorem 3 generalizes this result to a system with finitely many parameters μ. Then the author considers the above systems with denumerably many parameters μ. In two theorems he investigates the analytic and periodic behavior of the solutions of (1). A.N. Tikhonov and K.P. Persidskiy are mentioned in the paper. - There are 6 references, 5 of which are Soviet, and 1 French.

SUBMITTED: December 23, 1957

Card 3/3

ZhAUTYKOV, O. A., Dr. Phys-Math Sci -- (diss) "Investigation on the Theory of Calculating Systems of Differential Equations," Novosibirsk, 1960, 25 pp, 200 copies (Joint Scientific Council on Physics-Mathematical and Technical Sciences, Siberian Department, AS USSR) (KL, 47/60, 97)

BEDEL'BAYEV, Abdesh Kuramsyevich; ZHAUTYKOV, O.A., dotsent, kand.fiz.-mat. nauk, otv.red.; ALEKSANDRIYSKIY, V.V., red.; ALFEROVA, P.F., tekhn.red.

[Stability of nonlinear automatic control systems] Ustoichivost' nelineinykh sistem avtomaticheskogo regulirovaniia. Alma-Ata, Izd-vo Akad.nauk Kazakhskoi SSR, 1960. 162 p. (MIRA 13:10)
(Automatic control)

83222

S/041/60/012/002/003/005
C111/C333

16.3400

AUTHOR: Zhautykov, O.A.

TITLE: The Solution of the Boundary Value Problem for an Infinite System of Ordinary Differential Equations

PERIODICAL: Ukrainskiy matematicheskiy zhurnal, 1960, Vol. 12, No. 2, pp. 157-164

TEXT: Let G : $t \in [\alpha, \beta]$, $|x_k - a_k| \leqslant b$, $k=1,2,\ldots$ be a domain of the denumerable-dimensional space $(t, x_1, x_2, \ldots)$. Let $\omega_s(t, x_1, x_2, \ldots)$ be continuous and uniformly bounded in G, i.e.

(2) $|\omega_s(t, x_1, x_2, \ldots)| \leqslant M(t)$, $t \in [\alpha, \beta]$, M(t) positive and continuous. Let the Lipschitz condition

(3) $|\omega_s(t, x_1', x_2', \ldots) - \omega_s(t, x_1'', x_2'', \ldots)| \leqslant A(t)\Delta v$

be satisfied in G, where A(t), $t \in [\alpha, \beta]$ is continuous and $\Delta v = \sup [|x_1' - x_1''|, |x_2' - x_2''|, \ldots]$. The author considers the boundary value problem

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The Solution of the Boundary Value Problem for an Infinite System of Ordinary Differential Equations

(1) $\frac{dx_s}{dt} = \omega_s(t,x_1,x_2,\ldots)$, $s=1,2,\ldots$, (4) $x_k(t_k) = a_k$ $(k=1,2,\ldots)$,

where $t_k \in \sigma \subset [\alpha,\beta]$ and the length h of σ satisfies the condition

(5) $hN < b$,

where $N = \max[M(t),A(t)]$. Theorem 1 says that the problem (1)-(4) on σ possesses an equicontinuous system of solutions $x_1(t), x_2(t), \ldots$, which can be determined by the equivalent system of integral equations

(6) $x_s(t) = a_s + \int_{t_s}^{t} \omega_s[\tau, x_1(\tau), x_2(\tau), \ldots] d\tau$.

Theorem 2 says that this solution is unique. Theorem 3 says that the solution is uniformly continuous relative to the a_k, if t satisfies the condition $\sup[|x_1(t)-a_1|, |x_2(t)-a_2|, \ldots] < b$. The author gives conditions under which the solution of the infinite system can be sufficiently well

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The Solution of the Boundary Value Problem for an Infinite System of Ordinary Differential Equations

described by the solution of a "shortened" (finite) system.
The author mentions A.B.Nayshul'.
There are 2 Soviet references.

SUBMITTED: August 29, 1958

4

Card 3/3

ACCESSION NR: AT5002004

AUTHOR: Zhautykov, O. A.

TITLE: Use of the method of averaging to ... encountered in vibration theory

SOURCE: AN UkrSSR. Institut matematiki ...

[illegible]

TOPIC TAGS: averaging method, vibrating rod, partial differential equation, approximate solution, vibration theory, averaged equation

ABSTRACT: This article examines the problem of constructing a solution of the [illegible] linear partial differential equation:

$$\frac{\partial^4 u}{\partial t^2} [illegible] \frac{\partial^4 u}{\partial x^4} [illegible]$$

to which the problem of a vibrating rod reduces when the dissipation of energy [illegible] the material is taken into consideration. Here, [illegible] is a constant, $f($ [illegible] is a polynomial or holomorphic function with respect to [illegible], not containing a free term

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with coefficients depend[illegible] and boundary conditions [illegible]

The [illegible]

[illegible] the coefficients [illegible] tions [illegible] the system of equation[illegible]

It is then proved that the approximate [illegible] erging for the "truncated" system:

ACCESSION NR: AP

are a ... approximate

provide ... certain conditions of ...

ASSOCIATION: none

SUBMITTED: 00

NO REF SOV: 000

APPROVED FOR RELEASE: 07/19/2001 CIA-RDP86-00513R002064610010-1"

L 21003-66 EWT(d) IJP(c)

ACC NR: AP5028613 SOURCE CODE: UR/0041/65/017/001/0039/0046

AUTHOR: Zhautykov, O. A.

ORG: none

5
B

TITLE: Averaging principle in nonlinear mechanics applied to denumerable systems of equations

SOURCE: Ukrainskiy matematicheskiy zhurnal, v. 17, no. 1, 1965, 39-46

TOPIC TAGS: ordinary differential equation, differential equation system, mathematic physics, mechanics

Abstract: A review of averaging principles is given for systems of ordinary differential equations. It has been demonstrated elsewhere that the theorem of N. N. BOGOLYUBOV on averaging may be considered as a corollary of a generalized theorem for the continuous dependence of solutions of a differential equation

$$\frac{dx}{dt} = F(t,x,\lambda)$$

on parameter λ, where $F(t,x,\lambda)$ is a function of E^n defined for $t \in (0,T)$ and $x \in G$, $\lambda \in \Lambda$. These results were further extended by others, and from these the author obtains a finite system of differential equations

$$\frac{dx_k}{dt} = f_k(t,x_1,x_2,\ldots;\lambda) \quad (k = 1, 2, \ldots), \qquad (1)$$

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where $\lambda \in C^{\infty}$, a point of which is a finite family of continuous functions uniformly bounded by a constant. Conditions are given for the continuity of operator

$$x_k(t, \lambda) = x_k^0 + \int_0^t f_k[\tau, x(\tau), \lambda] d\tau \quad (k = 1, 2, \ldots). \qquad (2)$$

which is compact.
Three theorems are proved:
Theorem 1. Le the right-hand side Y_k of equation (1) satisfy the following conditions:
1) The functions Y_k are uniformly continuous with respect to every t and $x = x_1, x_2, \ldots)$, $t \in [0, T]$, $x \in D$.

2) Y_k in region H satisfy the Cauchy-Lipschits condition, for $x_1, x_2, \ldots$,

$$\left| f_k(t, x_1', x_2', \ldots; \lambda) - f_k(t, x_1'', x_2'', \ldots; \lambda) \right| \leq K \Delta u$$

$$(k = 1, 2, \ldots),$$

where K is a constant independent of t and λ. Here

$$\Delta u = \sup \left[|x_1' - x_1''|, \; |x_2' - x_2''|, \ldots \right].$$

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ACC NR: AP5028613

3) $Y_n \in H$ satisfies

$$|f_n(t, x_1, x_2, \ldots; \lambda)| \leq a_n,$$

where $a_n \to 0$ as $n \to \infty$. Then the operator generated by equations (2) is continuous with respect to the family of functions satisfying the condition

$$x_k(t, \lambda) = x_k^0 + \int_0^t f_k[\tau, x_1(\tau), x_2(\tau), \ldots; \lambda] d\tau \quad (k = 1, 2, \ldots)$$

in C^{∞} for some fixed $\lambda \in \Lambda$.

The other two theorems are similar. Theorem 3 applies the theorem of N. N. BOGOLYUBOV to the problem in the article. Orig. art. has 28 formulas. [JPRS]

SUB CODE: MA, ME / SUBM DATE: 13Sep63 / ORIG REF: 005 / OTH REF: 001

Card 3/3 BK

ZHAUTYKOV, O.A., akademik, otv. red.; AMANDOSOV, A.'., red.; YERZHANOV, Zh.S., doktor tekhn. nauk, red.; KIM. Ye.I., red.; PERSIDSKIY, K.P., akademik, red.; SHEVCHUK, T.I., red.

[Studies on differential equations and their application] Issledovaniia po differentsial'nym uravneniiam i ikh primeneniiu. Alma-Ata, Nauka, 1965, 1965. 199 p. (MIRA 18:8)

1. Akademiya nauk Kazakhskoy SSR, Alma-Ata. Sektor matematiki i mekhaniki. 2. Chlen-korrespondent AN Kaz.SSR (for Kim). 3. AN Kaz.SSR (for Zhautykov, Persidskiy).

ZHAUTYKOV, O.A.

Use of the method of averaging in solving a partial differential equation occurring in oscillation theory. Pribl.metod.resh.diff. urav. no.2:52-61 '64. (MIRA 18:4)

ZHAUTYKOV, O.A. (Alma-Ata)

The principle of averaging in nonlinear mechanics and its application to enumeration systems of equations. Ukr. mat. zhur. 17 no.1:39-46 '65. (MIRA 18:3)

BAGAUTDINOV, G.N.; ZHAUTYKOV, O.A.

Konstantin Petrovich Persidskii, 1903 - ; on his 60th birthday.
Usp. mat. nauk 18 no.6:241 '63. (MIRA 17:3)

ZHAUTYKOV, O. A.

Stability of Solution of the CAUCHY Problem for an Endless System of Equations Consisting of Partial Derivatives p.21

TRANSACTIONS OF THE 2ND REPUBLICAN CONFERENCE ON MATHEMATICS AND MECHANICS (TRUDY VTOROY RESPUBLIKANSKOY KONFERENTSII PO MATEMATIKE I MEKHANIKE), 184 pages, published by the Publishing House of the AS KAZAKH SSR, ALMA-ATA, USSR, 1962

PENTKOVSKIY, M.V., otv. red.; ~~ZHAUTYKOV, O.A., red.~~; MOLYUKOV, I.D., red.; PERSIDSKIY, K.P., red.; YATAYEV, M., red.; BEDEL'BAYEV, A.K., red.; OSADCHIY, F.Ya., red.; SHEVCHUK, T.I., red.; ALFEROVA, P.F., tekhn. red.

[Transactions of the Second Republic Conference on Mathematics and Mechanics] Trudy Vtoroy respublikanskoy konferentsii po matematike i mekhanike. Alma-Ata, Izd-vo Akad.nauk Kazakhskoy SSR, 1962. 183 p. (MIRA 15:7)

1. Respublikanskaya konferentsiya po matematike i mekhanike, 2d, Alma-Ata, 1959.
(Mathematics—Congresses) (Mechanics—Congresses)

S/044/62/000/007/034/100
C111/C222

AUTHOR: Zhautykov, O.A.

TITLE: The application of functional analysis to the solution of a problem of the dynamic stability of elastic systems

PERIODICAL: Referativnyy zhurnal, Matematika, no. 7, 1962, 63-64, abstract 7B299. ("Funktsional'n. analiz i yego primeneniye". Baku, AN Azerb SSR, 1961, 52-56)

TEXT: The author considers the uniqueness of the solution of the Cauchy problem for the integro-differential equation

$$v(x,t) + \int_0^1 m(\xi)K(x,\xi)\frac{\partial^2 v(\xi,t)}{\partial t^2}\,d\xi -$$

$$-\alpha\int_0^1 N_0(\xi)\frac{\partial K(x,\xi)}{\partial\xi}\,\frac{\partial v(\xi,t)}{\partial\xi}\,d\xi = 0.$$

[Abstracter's note : Complete translation.]

Card 1/1

ZHAUTYKOV, O.A. (Alma-Ata)

Extending the Hamilton-Jacobi theorems to an infinite canonical system of equations. Mat.sbor. 53 no.3:313-328 Mr '61. (MIRA 14:3)
(Differential equations, Partial)

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C111/C222

16.3500

AUTHOR: Zhautykov, O.A. (Alma-Ata)

TITLE: On the extension of the theorems of Hamilton-Jacobi to an infinite canonical system of functions

PERIODICAL: Matematicheskiy sbornik, vol.53, no.3, 1961, 313-328

TEXT: The paper treats the extension of the theory of Hamilton-Jacobi to the infinite system

$$\left.\begin{aligned}\frac{dx_k}{dt} &= \frac{\partial H}{\partial y_k}, \qquad (k=1,2,\dots), \\ \frac{dy_k}{dt} &= \frac{\partial H}{\partial x_k}\end{aligned}\right\} \qquad (1)$$

where $H = H(t, x_1, x_2, \dots, y_1, y_2, \dots)$.

Let the function $z(x_1, x_2, \dots)$ given in the countable-dimensional region $G : |x_k| \leqslant R$ $(k=1,2,\dots)$ have continuous uniformly bounded derivatives of first order and let it satisfy

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$$|z(x_1,x_2,\dots,x_{m-1},x'_m,x'_{m+1},\dots)-z(x_1,x_2,\dots,x_{m-1},x''_m,x''_{m+1},\dots)| \leq \varepsilon_m \Delta x, \tag{2}$$

where $\Delta x = \sup\left[|x'_m - x''_m|, |x'_{m+1}-x''_{m+1}|, \dots\right]$ and $\varepsilon_m \to 0$ with $m \to \infty$. Let the $x_1(s)$, $x_2(s)$, ... be real continuous functions with continuous derivatives of first order, and let

$$|x_k(s+\Delta s)-x_k(s)| \leq L\,|\Delta s| \quad (k=1,2,\dots), \tag{3}$$

where $\sup\left[|x_1(s)|, |x_2(s)|, \dots\right] \leq R$, L = const. Then there exists

$$\frac{dz}{ds} = \sum_{k=1}^{\infty} \frac{\partial z}{\partial x_k}\frac{dx_k}{ds}, \tag{4}$$

where the series converges if $\left|\frac{dx_k}{ds}\right| < +\infty$. Then the complete differential of $z = z(x_1,x_2,\dots)$ reads:

$$dz = \sum_{k=1}^{\infty} \frac{\partial z}{\partial x_k}\,dx_k.$$

Let a system be determined by the countable number of generalized coordinates $q_1, q_2, \ldots$. Let $\dot{q}_1 = \frac{dq_1}{dt}$, $\dot{q}_2 = \frac{dq_2}{dt}, \ldots$ be the generalized velocities. Let the series $\sum_{k=1}^{\infty} q_k^2$ converge at least in one point of $[t_1, t_2]$, let the series $\sum_{k=1}^{\infty} \dot{q}_k^2$ converge uniformly on $[t_1, t_2]$, where

$$\left.\begin{aligned} &|q_k(t+\Delta t)-q_k(t)| \leqslant K\Delta t, \\ &|\dot{q}_k(t+\Delta t)-\dot{q}_k(t)| \leqslant K\Delta t \end{aligned} \quad (k=1,2,\ldots),\right\} \qquad (6)$$

shall be satisfied, $K = \text{const}$. In analogy to the classical mechanics the author introduces the Lagrange function $L(t, q_1, q_2, \ldots, \dot{q}_1, \dot{q}_2, \ldots)$. The principle of the least action asserts: If in the moment $t = t_1$ the system is described by $(q_1^{(1)}, q_2^{(1)}, \ldots)$ and in the moment $t = t_2$ by $(q_1^{(2)}, q_2^{(2)}, \ldots)$ then meanwhile the system moves so that

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On the extension of the theorems...

$$I(\gamma) = \int_{t_1}^{t_2} L(t, q_1, q_2, \ldots ; \dot{q}_1, \dot{q}_2, \ldots)\,dt \tag{7}$$

has a minimum (that holds at least for sufficiently small parts of the path of motion). It is assumed that L is continuous, uniformly bounded, two times continuously differentiable and that it satisfies

$$\begin{aligned} &|L(t, q_1, q_2, \ldots, q_{m-1}, q'_m, q'_{m+1}, \ldots ; \dot{q}_1, \dot{q}_2, \ldots, \dot{q}_{m-1}, \dot{q}'_m, \dot{q}'_{m+1}, \ldots) - \\ &- L(t, q_1, q_2, \ldots, q_{m-1}, q''_m, q''_{m+1}, \ldots ; \dot{q}_1, \dot{q}_2, \ldots, \dot{q}_{m-1}, \dot{q}''_m, \dot{q}''_{m+1}, \ldots)| \leqslant \\ &\leqslant e_m \Delta q, \end{aligned}$$

$$\begin{aligned} &\left| \frac{\partial L(t, q_1, q_2, \ldots, q_{m-1}, q'_m, q'_{m+1}, \ldots, \dot{q}_1, \dot{q}_2, \ldots, \dot{q}_{m-1}, \dot{q}'_m, \dot{q}'_{m+1}, \ldots)}{\partial \dot{q}_k} - \right. \\ &\left. - \frac{\partial L(t, q_1, q_2, \ldots, q_{m-1}, q''_m, q'_{m+1}, \ldots, \dot{q}_1, \dot{q}_2, \ldots, \dot{q}_{m-1}, \dot{q}''_m, \dot{q}''_{m+1}, \ldots)}{\partial \dot{q}_k} \right| \leqslant \\ &\leqslant e_m \Delta q, \end{aligned} \tag{9}$$

where

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On the extension of the theorems...

$\Delta q = \sup \left[|q'_m - q''_m|, |q'_{m+1} - q''_{m+1}|, \dots, |\dot{q}'_m - \dot{q}''_m|, \dots \right]$, $\varepsilon_m \to 0$ for $m \to \infty$.

If the time t is not varied then by forming δI, as it is usual, there follow the Lagrange equations

$$\frac{\partial L}{\partial q_k} - \frac{d}{dt} \frac{\partial L}{\partial \dot{q}_k} = 0 \qquad (k=1,2,\dots). \tag{13}$$

Let $\sum_{k=1}^{\infty} \left(\frac{\partial L}{\partial \dot{q}_k}\right)^2 = \sum_{k=1}^{\infty} p_k^2$ converge uniformly on $t_1 \leq t \leq t_2$, then

$$dH = -\sum_{k=1}^{\infty} \dot{p}_k dq_k + \sum_{k=1}^{\infty} \dot{q}_k dp_k \tag{15}$$

where $H(t, p_1, p_2, \dots; q_1, q_2, \dots) = \sum_{k=1}^{\infty} p_k \dot{q}_k - L(t, q_1, q_2, \dots; \dot{q}_1, \dot{q}_2 \dots)$ is the energy of the system. From (15) there follows the canonical system

$$\frac{dq_k}{dt} = \frac{\partial H}{\partial p_k}, \qquad \frac{dp_k}{dt} = -\frac{\partial H}{\partial q_k}, \quad (k=1,2,\dots). \tag{16}$$

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On the extension of the theorems...

If L does not explicitly contain the time then there exists the energy integral H = const.
Let the function H and its derivatives $\frac{\partial H}{\partial q_k} = F_k$, $\frac{\partial H}{\partial p_k} = \phi_k$ in G :
$0 \leq t \leq T$, $|p_s| \leq R$, $|q_s| \leq R$ satisfy the condition of the kind (9). Let

$$u(t,p_1,p_2,\ldots,q_1,q_2,\ldots) = C \qquad (18)$$

be the integral of (16), where C is an arbitrarily constant, and u is a continuously differentiable function defined in G and satisfying the condition of the kind (9), the complete derivative of which with respect to t vanishes after the use of (16).
Let (u,H) be the Poisson-bracket; then

$$\frac{du}{dt} = \frac{\partial u}{\partial t} + (u,H).$$

Theorem 1: If $\varphi(t,p_1,p_2,\ldots,q_1,q_2,\ldots) = a$ and $\psi(t,p_1,p_2,\ldots q_1,q_2,\ldots) = b$ are first integrals of (16) then $(\varphi,\psi) = C$ is an integral of the system too.
Theorem 2: If (7) is considered as a continuously differentiable function
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On the extension of the theorems...

of the coordinates and the time which satisfies the "strengthened" Cauchy-Lipschitz condition (of the kind (9)) then this function satisfies the patial differential equation

$$\frac{\partial w}{\partial t} + H(t, q_1, q_2, \ldots; \frac{\partial w}{\partial q_1}, \frac{\partial w}{\partial q_2}, \ldots) = 0 \qquad (27)$$

(Hamilton-Jacobi equation of the system).
Theorem 3: Let $v(t, q_1, q_2, \ldots, a_1, a_2, \ldots)$ be a continuous uniformly bounded function of $t, q_1, q_2, \ldots$, defined in the region E : $0 \leq t \leq T$, $|q_k| \leq R$ $(k=1,2,\ldots)$. Let it have continuous partial derivatives with respect to the variables $t, q_1, q_2, \ldots$, as well as with respect to the parameters $a_1, a_2, \ldots$. Let it together with the derivatives $\frac{\partial v}{\partial a_i}$ $(i=1,2,\ldots)$ in E satisfy the condition

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$$\|v(t,q_1,q_2,\dots,q_{m-1},q'_m,q'_{m+1},\dots;a_1,a_2,\dots)-$$
$$-v(t,q_1,q_2,\dots,q_{m-1},q''_m,q''_{m+1},\dots;a_1,a_2,\dots)| \leqslant \varepsilon_m \Delta q,$$

$$\left|\frac{\partial v(t,q_1,q_2,\dots,q_{m-1},q'_m,q'_{m+1},\dots;a_1,a_2,\dots)}{\partial a_i}-\right.$$
$$\left.-\frac{\partial v(t,q_1,q_2,\dots,q_{m-1},q''_m,q''_{m+1},\dots;a_1,a_2,\dots)}{\partial a_i}\right| \leqslant \varepsilon_m \Delta q,$$

where $\Delta q = \sup\left[|q'_m-q''_m|, |q'_{m+1}-q''_{m+1}|, \dots\right]$, $\varepsilon_m \to 0$ with $m \to \infty$. Besides let the complete differential of v be equal to the expression

$$\sum_{k=1}^{\infty} p_k dq_k - H\,dt.$$

Then v satisfies the partial differential equation

$$\frac{\partial v}{\partial t} + H(t, q_1, q_2, \dots; \frac{\partial v}{\partial q_1}, \frac{\partial v}{\partial q_2}, \dots) = 0,$$

and the general integral of the infinite canonical system (16) is defined by

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$$\frac{\partial v}{\partial a_i} = b_i \quad (i=1,2,\dots), \tag{29}$$

$$\frac{\partial v}{\partial q_k} = p_k \quad (k=1,2,\dots), \tag{30}$$

where b_i $(i=1,2,\dots)$ are arbitrary constants.

It is shown that (16) is invariant with respect to the coordinate transformations

$$\begin{aligned} u_k &= u_k(p_1, p_2, \dots; q_1, q_2, \dots) \\ v_k &= v_k(p_1, p_2, \dots; q_1, q_2, \dots), \end{aligned} \qquad (k=1,2,\dots)$$

where u_k and v_k satisfy all conditions for H if

$$\begin{gathered} (u_k, v_j) = 0 \text{ for } k \neq j, \quad (u_k, v_j) = 1 \quad \text{for } k = j \\ \frac{\partial u_k}{\partial t} = 0, \ \frac{\partial v_k}{\partial t} = 0 \quad (k=1,2,\dots). \end{gathered} \tag{47}$$

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On the extension of the theorems...

There are 3 Soviet-bloc references.

SUBMITTED: June 17, 1959

Card 10/10

ZHAUTYKOV, O.A.

Developing the characteristic of a partial differntial equation of the first order of an enumeration set of variables on the basis of the reduction method. Izv. vys. ucheb. zav.; mat. no. 3:127-140 '60. (MIRA 13:12)

1. Kazanskiy gosudarstvennyy pedagogicheskiy institut imeni Abaya. (Differential equations, Partial)

ZHAUTYKOV, O.A.

Solution of a boundary value problem for an infinite system of ordinary differential equations. Ukr. mat. zhur. 12 no.2:157-164 '60. (MIRA 13:10)

(Differential equations) (Boundary value problems)

ZHAUTYKOV, ~~O.A.~~; PENTKOVSKIY, M.V.

Problems in the development of mathematics in Kazakhstan. Vest.
AN Kazakh.SSR 16 no.8:9-19 Ag '60. (MIRA 13:9)
(Kazakhstan--Mathematics)

ZHAV, B. V.

"Studies of Structure and Multiplication Cycles of the Rickettsia Prowazeki," Rumyantsev, A.V., Krantovskaya, M.K., Savitskaya, Ye. P. and Zhav, B.V., Dokl. AN SSSR, Nova Ser., 58, No.2, 1947

Report results of studies conducted on the Rickettsia prowazeki. Studies developmdnt of this disease: 1) in the light of muscles due to prenasal infection of latter. and 2) in the intestines due to perineal infection. Submitted by Academician I. I. Shmal'gauzen, 20 Mar 1947. 49T51

SEN, P.K.; PARUKLAR, G.B.; DRUVA, A.Zh.; ZHAVERI, P.M. (Bombey, Indiya)

Open-heart surgery with selective cerebral hypothermia. Eksper. khir. i anest. 8 no.4:55-59 Jl-Ag '64. (MIRA 17:5)

L-32733-66 EWT(m)/T IJP(c)
ACC NR: AP6011714 SOURCE CODE: UR/0203/66/006/002/0411/0412

32
B

AUTHOR: Kapustin, I. N.; Zhavkov, V. A.

ORG: Polar Geophysical Institute, Kola Branch of AN SSSR (Polyarnyy geofizicheskiy institut, Kol'skiy filial AN SSSR)

TITLE: Use of the SI-5G counters in the pre-Geiger plateau 19

SOURCE: Geomagnetizm i aeronomiya, v. 6, no. 2, 1966, 411-412

TOPIC TAGS: Geiger counter, particle counter, cosmic ray particle, cosmic ray measurement

ABSTRACT: The comparatively long dead time of counters when operating in the Geiger region and the limited service life appreciably lower the qualitative indices of apparatus recording cosmic rays and its reliability. Consequently, the authors measured the dead time and recorded the counting characteristics in the pre-Geiger plateau in order to find out if counters could operate at low voltages. The counting characteristic curves are given for the SI-5G counter obtained upon changing the voltage from 1000 to 1300 V at a sensitivity of the recording electronic circuit from $1\cdot10^{-8}$ to $64\cdot10^{-8}$ A. The section of the characteristic curve above 1200 V characterizes the work of the counter in the Geiger plateau. The

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ACC NR: AP6011714

section below 1200 V to 20—50 V is apparently unsuitable for operation due to the presence of a pronounced negative slope of the characteristic curve. This negative slope is explained by the dead time of the counter markedly increasing above 1200 V. It is recommended that an operating point be selected approximately 40—50 V below the start of the Geiger plateau. If the operating point is selected to be 1170 V at a sensitivity of the discriminator of $2 \cdot 10^{-8}$ Å, the control discriminator should have a sensitivity of $64 \cdot 10^{-8}$ A. The data presented in the article gives grounds to assume that the SI-5G counters can be used in the proportional region in large-area meson telescopes where high reliability of the sensors is required. Orig. art. has: 2 figures.

SUB CODE: 18 / SUBM DATE: 16Feb65 / ORIG REF: 003

Card 2/2 JS

BELOV, V. B., gornyy inzh.; ZHAVLYUCHENKO, A. I., gornyy inzh.; KHUDYAKOV, M. Ya., gornyy inzh.; SHENDEROVICH, I. M., gornyy inzh.; SONKIN, V. D., gornyy inzh.

Anchor bolting in hydraulic mines. Ugol' Ukr. 6 no.10:31-32 O '62. (MIRA 15:10)

1. Ukrainskiy nauchno-issledovatel'skiy institut gidrodobychi uglya.

(Donets Basin—Hydraulic mining)
(Mine roof bolting)

YEROFEYEV, B.V.; NAUMOVA, S.F.; TSYKALO, L.G.; ZHAVNERKO, K.A.

Polymerization of 1,3-cyclohexadiene. Dokl.AN BSSR 3 no.3:95-99 Mr '59. (MIRA 12:8)

(Cyclohexadiene)

IEROFEYEV, B.V. [Erafeeu, B.V.]; ZHAVNERKO, K.A. [Zhaunerka, K.A.]

Kinetics of the initiated liquid-phase oxidation of cyclohexanol. Vestsi AN BSSR. Ser. fiz.-tekh. nav. no.3:51-58 '63. (MIRA 16:10)

NAUMOVA, S.F.; KOVALEVA, V.N.; ZHAVNERKO, K.A.

Production of 1,2-dihydronaphthalene through 1,2,3,4-tetrahydro-1-naphtol hydroperoxide. Dokl. AN BSSR 5 no.3:109-111 Mr '61. (MIRA 14:3)

1. Institut fiziko-organicheskoy khimii AN BSSR. Predstavleno akademikom AN BSSR B.V. Yerofeyevym.
(Naphthalene) (Naphthol)

ZHAVORONKIN, A. (Moskva); MALYUKOV, I.; KHODYREVA, Ye.

Improve the shoe trade. Sov.torg. no.2:31-34 F '59.
(MIRA 12:2)

1. Direktor magazina No.6 Mosobuv'torga (for Malyukov). 2. Direktor Sverdlovskogo obuv'torga (for Khodyreva).
(Shoe industry) (Retail trade)

S/035/62/000/002/042/052
A001/A101

AUTHORS: Zhavoronkin, I. A., Pavlovskiy, V. I.

TITLE: On adjustment of variometric and gravimetric surveys

PERIODICAL: Referativnyy zhurnal, Astronomiya i Geodeziya, no. 2, 1962, 27, abstract 2G164 (V sb. "Razved. i promysl. geofiz.", no. 41, Moscow, 1961, 84 - 93)

TEXT: On the basis of observational data in the Kursk Magnetic Anomaly region, the authors investigated the problem on the joint utilization and adjustment of measurements performed with variometers and gravimeters under different conditions of topography relief and the character of occurrence of anomalous masses. They provide recommendations for the favorable arrangement of observational stations for variometers and gravimeters. The methods are indicated how to take into account the effect of vertical gravity gradients. There are 7 references.

P. Shokin

[Abstracter's note: Complete translation]

Card 1/1

ZHAVORONKIN, I.A.; STRAKHOV, V.N.

Interpreting complex magnetic anomalies in the Belgorod region of the Kursk Magnetic Anomaly. Prikl. geofiz. no.31:248-256 '61. (MIRA 15:3)

(Belgorod region--Magnetic prospecting)

PAVLOVSKIY, V.I.; ZHAVORONKIN, I.A.

Connection between anomalies with weak intensity and high-grade iron ores of the Kursk Magnetic Anomaly. Geofiz. razved. no.9: 45-51 '62. (MIRA 15:9)

(Kursk Magnetic Anomaly—Iron ores)
(Gravity prospecting)
(Magnetic prospecting)

PAVLOVSKIY, V.I.; ZHAVORONKIN, I.A.

Objectives of the further study of the Belgorod iron ore province using geophysical methods. Mat. po geol. i pol. iskop. tsentr. raion. evrop. chasti SSSR no.2:222-229 '59. (MIRA 13:9)

1. Kurskaya geofizicheskaya ekspeditsiya.
(Kursk Magnetic Anomaly--Iron ores)
(Prospecting--Geophysical methods)

ZHAVORONKINA, T.K.

Use of the spectral method for determining magnesium in atmospheric precipitation. Trudy MGI 10:133-135 '57. (MIRA 11:3)
(Sea air) (Precipitation (Meteorology))

Zhavoronkina, T.K.

24(7) PHASE I BOOK EXPLOITATION SOV/1700

Lvov. Universitet

Materialy X Vsesoyuznogo soveshchaniya po spektroskopii, 1956. t. II: Atomnaya spektroskopiya (Materials of the 10th All-Union Conference on Spectroscopy, 1956. Vol 2: Atomic Spectroscopy) [Lvov] Izd-vo L'vovskogo univ., 1958. 568 p. (Series: Its: Fizicheskiy sbornik, vyp. 4(9)) 3,000 copies printed.

Additional Sponsoring Agency: Akademiya nauk SSSR. Komissiya po spektroskopii.

Editorial Board: G.S. Landsberg, Academician, (Resp. Ed.); B.S. Neporent, Doctor of Physical and Mathematical Sciences; I.L. Fabelinskiy, Doctor of Physical and Mathematical Sciences; V.A. Fabrikant, Doctor of Physical and Mathematical Sciences; S.M. Rayskiy, V.G. Koritskiy, Candidate of Technical Sciences; L.K. Klimovskaya, Candidate of Physical and Technical Sciences; V.S. Miliyanchuk Candidate of Physical and Mathematical Sciences; A.Ye. (Deceased), Doctor of Physical and Mathematical Sciences; Glauberman, Doctor of Physical and Mathematical Sciences; Ed.: S.L. Gazer; Tech. Ed.: T.V. Saranyuk.

PURPOSE: This book is intended for scientists and researchers in the field of spectroscopy, as well as for technical personnel using spectrum analysis in various industries.

COVERAGE: This volume contains 177 scientific and technical studies of atomic spectrography presented at the 10th All-Union Conference on Spectroscopy in 1956. The studies were carried out by members of scientific and technical institutes and include extensive bibliographies of Soviet and other sources. The studies cover many phases of spectroscopy: spectra of rare earths, electromagnetic radiation, physicochemical methods for controlling uranium production, physics and technology of gas discharge, optics and spectroscopy, abnormal dispersion in metal vapors, spectroscopy and the combustion theory, spectrum analysis of ores and minerals, photographic methods for quantitative spectrum analysis of metals and alloys, spectral determination of the hydrogen content of metals by means of isotopes, tables and atlases of spectral lines, spark spectrographic analysis, statistical study of variation in the parameters of calibration curves, determination of traces of metals, spectrum analysis in metallurgy, thermochemistry in metallurgy, and principles and practice of spectrochemical analysis.

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Materials of the 10th All-Union Conference (Cont.) SOV/1700

Kustanovich, I.M. Spectrum Analysis of Different Types of Products by One Calibration Curve 533

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Zhavoronkina, T. K.

49-58-3-4/19

AUTHORS: Zhavoronkina, T. K. and Dmitriyev, A. A.

TITLE: Distribution of the chlorine concentration in atmospheric precipitation above mainlands. (Raspredeleniye kontsentratsii khlora v atmosfernykh osadkakh nad materikom).

PERIODICAL: Izvestiya Akademii Nauk SSSR, Seriya Geofizicheskaya, 1958, Nr. 3, pp. 330-336 (USSR).

ABSTRACT: The distribution of chlorine in the atmospheric precipitation above mainlands is considered and an attempt is made to derive theoretically the distribution of chlorine by means of analysis of a model of a mainland of rectangular contour of a width H and a length L in the case of a wind in the longitudinal direction, assuming a constant salinity c of the rain masses at the edges. The loss in salinity is proportional to the original salinity multiplied by the relative speed of precipitation. The basic relation is Eq.(1), p.330. The law expressing the distribution of the concentration for the mainland model under consideration is Eq.(19), p.332. For obtaining statistically justified data on the salinity of the precipitation, a mass collection was made of samples which were analysed spectrally by a network of meteorological stations distributed along two straight lines, one from

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Distribution of the chlorine concentration in atmospheric precipitation above mainlands.

west to east, along the middle zonal direction of the wind in the atmosphere; the other along a meridian in the central part of the European part of the Soviet Union enabling observation of the distribution of the salinity from the Barents Sea to the Black Sea. In addition to salinity, the chlorine concentration was investigated. The values of chlorine concentration measured in twelve stations during winter and summer are entered in a table, p.333 and the values of the average dispersion of the individual observations for the respective months and periods are also given. The experimentally determined results are plotted on charts, Figs.2 and 3, and compare favourably with the theoretically derived results. The assumption was confirmed of the smaller role played by the smaller Black Sea than by the larger northern seas; however, the differences are within the limits of random divergences and, therefore, cannot be considered as sufficiently conclusive. Acknowledgments are made to V. V. Shuleykin for formulating the subject of investigations. There are 4 figures and 1 table.

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Distribution of the chlorine concentration in atmospheric precipitation above mainlands.

SUBMITTED: March 15, 1957.

ASSOCIATION: Ac.Sc. USSR, Marine Hydrophysics Institute. (Akademiya Nauk SSSR Morskoy Gidrofizicheskiy Institut).

AVAILABLE: Library of Congress.

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